

What is claimed is:

1. A game device for proceeding a game by placing objects related to the game in a three-dimensional virtual space and
5 by controlling said objects, comprising:

first game proceeding means for proceeding the game by controlling said objects in a first game field in said three-dimensional virtual space;

second game proceeding means for proceeding the game by
10 controlling said objects in a second game field in said three-dimensional virtual space; and

perspective transformation display means for forming a screen picture by transforming the coordinates of each object in said first and second game fields existing within view of
15 a viewpoint located in said three-dimensional virtual space.

2. A game device according to claim 1, wherein said first game proceeding means and said second game proceeding means are capable of determining respective proceeding speeds of said
20 first game field and said second game field separately.

3. A game device according to claim 1, wherein when the viewpoint is moved between said first game field and said second game field, said perspective transformation display means

reduces one game field and displays the reduced game field in a picture of the other game field.

4. A game device for proceeding a game by placing objects
5 related to the game in a three-dimensional virtual space and
by controlling said objects, comprising:

first game proceeding means for proceeding the game by
controlling said objects in a first game field in said
three-dimensional virtual space;

10 second game proceeding means for proceeding the game by
controlling said objects in a second game field in said
three-dimensional virtual space;

mutual processing means for processing the game between
said first and second game fields and for placing and
15 controlling said objects in relation to said processing; and

perspective transformation display means for forming a
screen picture by transforming the coordinates of each object
within view of a viewpoint located in said three-dimensional
virtual space.

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5. A game device according to claim 4, wherein said first
game proceeding means and said second game proceeding means
are capable of determining respective scroll speeds of said
first game field and said second game field separately.

6. A game device according to claim 4, wherein when the viewpoint is moved between said first game field and said second game field, said perspective transformation display means
5 reduces one game field and displays the reduced game field in a picture of the other game field.

7. A game device for proceeding a game by placing game objects related to the game in a three-dimensional virtual
10 space and by controlling said objects, comprising:

first game proceeding means for proceeding the game by controlling said game objects in a first game field in said three-dimensional virtual space;

second game proceeding means for proceeding the game by
15 controlling said game objects in a second game field in said three-dimensional virtual space;

cursor object forming means for forming a cursor object indicating a certain area of one of said first and second game fields as well as an area of the other game field corresponding
20 to the certain area; and

perspective transformation display means for forming a screen picture by transforming the coordinates of each object including said cursor object within view of a viewpoint located in said three-dimensional virtual space.

8. A game device according to claim 7, wherein said
cursor object forming means forms said cursor object as a
polyhedron with an area of said one game field as its top and
5 with an area of said other game field as its bottom.

9. A game device according to claim 7, wherein said
cursor object forming means displays information on the side
face of said cursor object.

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10. A game device according to claim 7, wherein said
cursor object forming means sets display scales of the top and
bottom of said cursor object, respectively corresponding to
the display scales of said first and second game fields.

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11. A game device for proceeding a game in a game field
formed in a three-dimensional virtual space, comprising:

cursor moving means for moving a cursor in said game field
in accordance with operation;

20 viewpoint moving means for moving a viewpoint located in
said three-dimensional virtual space in accordance with said
cursor;

coordinate transforming means for transforming a view
range of said viewpoint into a screen coordinate system; and

viewpoint position adjusting means for adjusting a position of said viewpoint so that a non-mapping area will not appear on the screen when said view range extends beyond a mapping area, in which a picture of said game field is drawn,
5 to the non-mapping area.

12. A game device according to claim 11, wherein said viewpoint position adjusting means adjusts the position of said viewpoint so that said cursor will be located at the center
10 of said view range.

13. A game device according to claim 11, wherein said viewpoint position adjusting means adjusts the position of said viewpoint on condition that said cursor has moved beyond said
15 view range.

14. An information storage medium with a program stored thereon, said program for activating a computer system as a game device described in claim 11.

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15. A game device for proceeding a game in a game field formed in a three-dimensional virtual space, comprising:

viewpoint moving means for moving a viewpoint in conformity with a cursor moving in said game field in accordance

with operation;

coordinate transforming means for transforming a position of said cursor from a three-dimensional coordinate system to a display coordinate system; and

5 viewpoint position adjusting means for finding the position of the viewpoint with said cursor being located at a central position of a display range of a screen and for adjusting the position of said viewpoint when the position of said viewpoint is beyond a margin area so that said viewpoint
10 will be located within the margin area.

16. A game device according to claim 15, wherein said margin area is the area where the viewpoint can be moved without causing the non-mapping area of said game field to appear.

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17. An information storage medium with a program stored thereon, said program for activating a computer system as a game device described in claim 15.

20 18. A game device, comprising:

a memory for storing, as picture data, a plurality of patterns of different sizes in a plurality of areas divided in accordance with a line number in one frame;

a picture data processing device for reading the picture

data from said memory, processing the data at a designated reduction/expansion factor, and supplying the processed data to a picture display device;

reduction/expansion factor setting means for finding a
5 reduction/expansion factor, which corresponds to the position on a screen as specified by the frame and line of a video signal to be drawn, on the basis of a first function and for setting the reduction/expansion factor at said picture data processing device;

10 pattern size outputting means for determining, on the basis of a second function, a size pattern corresponding to said position on the screen; and

reading position setting means for obtaining an address of the pattern to be read from said memory on the basis of said
15 position on the screen and a moving speed on the screen as decided for the determined pattern, and for setting the address at said picture data processing device.

19. A game device according to claim 18, wherein said
20 plurality of patterns of different sizes are rain patterns of large, medium and small sizes.

20. An information storage medium with a program stored thereon, said program for activating a computer system as a

game device described in claim 18.

21. An information storage medium with a program stored thereon, said program for activating a computer system as a
5 game device described in claim 1.